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Newsline

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Help in relocation available

As a result of the recent reduction in force a total of 99 positions were cut from the Alberta Research Council. Of the total, 31 were vacant positions and another 68 involved employee layoff.

Reductions were made in the Executive Office and in the Finance and Administration Division to maintain the overhead rate at the same level as before.

The Human Resources Department currently offers a number of services and programs, designed to reduce the impact of downsizing on those affected.

Joan Cartmell, Staffing Advisor, Human Resources Department, says the department will redeploy as many people as possible.

"We are working to see where those let go can fit into other job opportunities," she says. "As opportunities arise, we will assess the qualifications of those affected and make these jobs available to suited individuals. These people will be contacted by phone and/or letter. To date, we expect to redeploy at least five of the people affected and we hope to do more.

"In general, staff will receive notice of position vacancies on an ongoing basis and bulletins will continue to be posted on the Research Council's bulletin boards."

Joan Cartmell, Human Resources Department, displays some of the material available to those seeking a new job.

Programs are also in place to help staff who have been laid off in their job search. A formal, three-day workshop is currently being conducted by the Technical Service Council on behalf of the Research Council. Topics focus on the job market, resume preparation, planning a job search and the interview process. The next session is scheduled for March 16, 18 and 20.

Henry Range, formerly with the Terrain Sciences Department, attended the February workshop and believes it was worthwhile.

"My attitude towards approaching the job hunt and what my chances of success might be has changed completely since taking the workshop," he says. "It helped me to realize that possibilities do exist if you know where to look and gave me the tools necessary to establish my own market for my particular skills.

"I believe the workshop is essential for anyone in the position of having to look for a new job. It got rid of a lot of false perceptions I had. I now feel enthusiastic about my job search. I realize it will take a lot of hard work, but now that I have the tools to approach it in the proper way, I feel confident I will be successful."

Employees have been invited to take advantage of individual counselling and other assistance from Human Resources.

"The Research Council will provide some clerical service for employees laid off in the area of resume preparation, typing and photocopying," Joan says. "Where the need arises, we have also set aside a block of offices from which individuals can conduct their job search during the initial layoff period.

"Our goal is to be as helpful as possible in providing assistance to those affected by the layoffs," she says.

Newsline is a monthly publication for the employees of the Alberta Research Council.

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and direct all questions to
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Management of computing activities reorganized

The Operations Committee recently replaced the Computer Coordinating Committee (CCC) with a new structure, designed to increase the efficiency in management and coordination of computing activities.

"The Research Council is continuously putting more of its resources and activities into computing. The workload and demand on the Computer Coordinating Committee has grown to the point where it was becoming less effective," says Dr. Robert Green, Vice-President, Operations.

"The new structure divides areas of responsibility which we feel will hasten the decision making process."

A summary of the new organization follows:

Computer Management Group (CMG)

A group of four department heads have been assigned the responsibility of policy and planning:

- Computing Department - Dr. Zdenek Vintr (Chairman of CMG)
- research computing - Dr. Bob Humphries
- business computing - Bob Moore
- computing research - Dr. Brian Barge

The CMG will, in turn, depend upon the work of the following three groups of specialists to make technical and coordination recommendations.

Computing Coordination Forum (CCF)

This group will be comprised of specialists representing each department of the Alberta Research Council. Work efforts will concentrate on the development of computing plans for each of the departments and proposals for corporate policies and strategies. The group will also provide an ongoing coordination among Research Council departments.

Research Council-wide 'Technical Expert Groups'

Also referred to as Special Interest Groups (SIGs), these groups will conduct ongoing studies of available technology and maintain approved product lists. Standards and guidelines for different areas of expertise will also be developed by this body.

Computing Department

This group of full time specialists will continue to carry out the day-to-day support functions necessary for the successful operation of the Alberta Research Council's computing systems.

Dr. Vintr, Director, Computing Department and Chairman of the new CMG sees some imminent changes as a result of the reorganization.

"A set of interim policies and guidelines addressing computer procurement and future planning will be developed and presented to department heads," he says.

"With the necessary technical expertise in place, we will be able to ensure that the steps of studying feasibility, alternatives and system planning will be properly addressed before individual proposals for the purchase of a system are submitted. This ensures the department receives the equipment it needs and that matters of compatibility and networking have been adequately addressed."

The new system is expected to improve decision making, purchase approvals and the effectiveness of computing activities in the Research Council according to Dr. Green.

"While the structure may appear complex, we expect it will prove to be less ponderous than having one large committee concerned with making decisions in all areas. A review of the structure will be conducted in six months, followed by any needed modifications."

Employee changes

We welcome to the Research Council: **Robert Heimann**, Manager, Industrial Products and Materials, Industrial Technologies; **Marlene Jones**, Expert Systems Researcher, Advanced Technologies; **Janis Koehler**, Occupational Health Nurse, Human Resources; **Shelly MacEachern**, Clerk Typist, Oil Sands; **Li-Ping Yuan**, Reservoir Geologist, Geological Survey.

We say goodbye to: **Sarah Gallazin, Anne Ing, Melonie Kaplan, Kevin Knill, Valerie Kress, Mark Lazar, Mahendra Patel, Chris van der Merwe.**

Advanced Te

The final article in a five part se
of the province - *Elizabeth Page*

Technological change and the growth of a high technology industry has sometimes been called a battle for survival. Leaders at every level—industry, government, education—have sounded warnings that Canada can no longer rely on its natural resource base if it is to be competitive with other nations.

Nowhere across the country is that message more imperative than in Alberta which has suffered the consequences of falling prices and demand in the energy and agricultural sectors over the past four years. Today the watchword is diversify or die. While the natural resources of energy, forestry and farming are and will remain keystones to Alberta's economy, a huge effort is being directed toward promoting and supporting development of high technology industries and the application of new technologies to existing industry.

"Combining technology with marke needs to strengthen companies' competitive edge is vital to their survival,' says Dr. Brian Barge, Head of the Advanced Technologies Department.

The Advanced Technologies Department was set up nearly three years ago when the Research Council recognized that information and automation represented key areas for diversification and that research activity should be at least partly driven by what Dr. Barge calls the synergy between technology push and market pull.

"We identified the need for computing and automation technologie and since we had a base of research expertise in these areas, particularly in computing, we wanted to capitalize on the new technologies."

The very nature of advanced technologies in terms of research requires careful balance in the work to be conducted by the Research Council. In describing his strategy, Dr. Barge say "we need to be a little ahead of industry, so we are conducting research on expert systems and robotics that w believe will be relevant to the industria sector a few years from now."

Some of the problems are particularly challenging and not easily solved through short term research and development. The Advanced Technologies Department, by choosing to do applied research in the areas of artificia

hnologies leading the way for industry

describing the work of the Alberta Research Council and how it supports the economic development

obotics engineer Keith Chrystall uses a teach pendant to put the Advanced Tech-
ologies Department's robot arm through its paces.

telligence, expert systems and ro-
otics, has adopted a leadership role in
lberta.

"We have put together a group of
ientists, headed by Dr. Ernest Chang,
ho are among the most skilled arti-
cial intelligence and expert systems
eople in the country. They are not only
apable of conducting good, solid
esearch and development on challen-
ing problems, but are also able to
ansfer knowledge to the private sec-
or. We match our capability and
chnology with an industrial need."

That need can take many forms–auto-
ated conveyor systems, computer-
ided design, computer-aided engineer-
g systems, robotics, sensors, signal
rocessing and expert systems technolo-
ies used in flexible manufacturing
ystems and in applications for agricul-
ure and energy. According to Dr.
arge, a growing list of Alberta-based
ompanies, ranging from manufac-
rers of pressure vessels to food pro-
essors and prosthetics designers, have
ntered discussions with his depart-
ent.

"We want to help these companies—
at's our business. They want to be
ompetitive—that's their business.
Vhen we can put the two elements
ogether, we are fulfilling our mission," he says.

One of the most successful collaborative efforts is that of joint research ventures, in which the Research Council cost shares, on a 50-50 basis with a company, research projects leading to a marketable product or process for the company. One of the earliest of these projects has been with Nortech Surveys (Canada) Inc., Calgary, to enhance a laser profiling system and develop software and hardware which will accurately produce real-time aircraft positioning and very precise land positioning using Global Positioning Satellite (GPS) technology.

Nortech's laser profiling product is already being used for airborne surveys in Indonesia and the results of the joint research venture will give Nortech a competitive edge for future contracts using this technology when the GPS technology is fully deployed in the late 1980s.

In a joint research venture with Veritas Software Ltd., Calgary, a leader in seismic software development, to develop new seismic technology utilizing vertical seismic profiles, new scientific findings have caught the attention of U.S. geophysicists. Additionally, Veritas is already producing and marketing portions of the computer software and despite the depressed economy, is projecting revenues of more than $150,000 this year and expects to double its sales in 1988.

A joint research venture with Q.C. Data Collectors Ltd., Calgary, has produced a map editing workstation, compatible with an IBM PC/AT, and has sold one of these, with sales projections of five more this year.

The announcement in February of two new contracts, one with Western Geophysical Company of Canada, Ltd. to develop precision seismic for enhanced oil recovery, and with Pelorus Aviation Supplies (Canada) Ltd. for a microwave landing system, brings to nine the total number of joint research ventures. Thus far, the Research Council's share in joint research ventures has reached more than $8.4 million.

The Advanced Technologies Department has established a close working relationship with Technology, Research and Telecommunications and Economic Development and Trade, and is active in presenting seminars and workshops to various groups in industry and government, using these opportunities to discuss the theme of new technologies.

Dr. Barge points to another aspect of the current work: to keep moving. Once an area, such as expert systems for example, becomes prevalent in industry, the Research Council should not be competing in that area, but move into new fields.

"I expect there to be good science and technology in the department's core program, science that is just behind the cutting edge," he says. "But we want to make sure the kind of activities we conduct are relevant to the industrial sector —we don't want an ivory tower operation."

And in summing up, Dr. Barge had this to say: "Let's remember why we do this—we do research and development so we can create a better way of living and a better society. The measures are economics, wealth and societal well-being; that's where our industry-directed kind of activity is focused. The delivery of science and technology to industry and hence the improvement of Alberta, is what we are really all about."

New policy developed for the management of large projects

Costly problems have arisen in the past when an individual or department attempted to handle all aspects of a large project singlehandedly.

Undesirable obligations have resulted from decisions, which were far beyond the authority of the person or persons making them. In other cases, unwarranted expectations were raised about the Research Council's intentions or ability to undertake certain activities.

To prevent situations of this nature, a policy has been developed to put a steering committee in place to review and manage special projects.

Dr. Duncan Currie, Vice-President, Applied Sciences, explains how the steering committee operates.

"When someone expects a new program will generate revenues or cause expenditures in excess of $200,000, including costs incurred by others on the Research Council's behalf, they will inform their vice-president. The vice-president will, in turn, bring it to the Research Committee.

If further discussion is warranted the Chairman of the Research Committee, Dr. Robert Stewart, has the opportunity to set up a steering committee. This committee will review the implications of proceeding, including human, financial and facility resources available and decide whether or not to proceed," he says.

"The steering committee will normally include the president, vice-president, operations and/or the divisional vice-president involved in the project. Where projects involve major activities by departments in different divisions, each respective vice-president should also be involved.

"If it is feasible to continue the project beyond the early stages, a recommendation to proceed will be presented to the Research Committee for approval."

Dr. Currie stresses that no suggestion of a new research initiative should be made to any outside agency or client until this approval is obtained.

"The steering committee will receive more detailed information as contract negotiations proceed. If circumstances warrant it, the steering committee can request a written review from one or more paid, unbiased experts from outside the Research Council," he says.

"Once the contract is signed, the project manager or team will report to the steering committee during the course of the project and at its conclusion."

Dr. Currie believes the process will prevent situations from getting out of hand, especially at the early stages of discussion.

Dr. John Godfrey signs off a proof of the last in a series of reports on his Precambrian Shield research. Dr. Godfrey, who recently retired, has produced 14 Alberta Research Council reports on the Shield of northeastern Alberta over the last 30 years.

Reminder to staff

To book a meeting in the boardroom, conference room, auditorium or multipurpose room at the south Edmonton site you must contact Maureen Weeks at 450-5111. (It is possible to check the availability of these rooms in advance by entering $boo on the Titan system.)

Lynda Strader, 450-5091, must be contacted if any audiovisual equipment will be required and arrangements for refreshments must be made through the cafeteria by contacting Shirley Stevens at 461-2948.

When possible, it is preferable to start meetings after 8:30 a.m. to allow for set up time.

Technical seminar March 16

Andrew Gilliland, P.Eng., Joint Manager, Industrial Development Department, will present the next technical seminar Monday, March 16 at 11:00 a.m. in the auditorium. His topic will be an Overview of Industrial Development Programs. All staff are encouraged to attend this seminar series, designed to increase awareness and appreciation of our research projects. (Please note the change from the previously published date.)

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